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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,182	04/01/2004	Takashige Hiratsuka	2004_0503A	6448

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WASHINGTON, DC 20006-1021

EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,182

Applicant(s)

HIRATSUKA, TAKASHIGE

Examiner

Aristotelis M. Psitos

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS documents of 6/04 & 7/06 have been received and made of record.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular claim 4 recites a desired result – ultimate paragraph thereof – which contradicts the disclosure – see the corresponding PGPUB document 2004/0228233 paragraph 85.

The examiner interprets the disclosed capability as a function of the "invalid" edge cancel unit as recited in claim 5 as performing the above noted function in keeping with the disclosure, and recommends incorporation such into claim 4.

As far as the claims recite positive limitations, the following rejections are made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art further considered with Konno et al.

The acknowledged prior art (of the submitted figure 10) IN THE PENDING APPLICATION lacks any mention/function/capability of limiting the result of the phase comparison by the appropriate elements. All other elements are present.

Konno et al discloses/teaches in this environment the ability of having a pulse limiting capability in a phase circuit of an optical playback device – see the discussion with respect to element 35 in figure 7 for instance.

It would have been obvious to modify the base system of the acknowledged prior art (further identification of such –if possible is respectfully requested to complete the search report) with the additional limiting capability taught by Konno et al for the reasons discussed therein.

The limitations of claim are included in the above combination of references, i.e., the first three recited units are part of the acknowledged prior art, while the last element, the limit control unit is the teaching from Konno et al.

The limitations of claim 3 are met, i.e., the decision predicated on the pulse length -.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1-3 above, and further in view of Nakajima et al.

As noted above, the ultimate paragraph of this claim does not follow from the structure recited – i.e., the disclosure disagrees herewith.

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As far as the claim does recite positive limitations, the edge detection circuitry, such is known and taught by the Nakajima et al reference – see the discussion with respect to the edge detection circuit 11.

It would have been obvious to modify the base system as relied upon above with respect to claims 1-3 and further modify such with the additional teaching from Nakajima et al, motivation is as discussed herein.

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 4 above, and further in view of Hayashi ('521).

Hayashi teaches in this environment the ability of "invalidating" pulse detection, such a capability is taught/discussed by the Hayashi document – see the discussion commencing with figure 31 and element 125 therein.

The remaining dependent claims (limitations thereof) 6 and 7 are present in the discussion in Hayashi.

It would have been obvious to modify the base system as relied upon with respect to claims 103 above with the additional teaching from Hayashi, motivation is as discussed therein.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art further considered with Konno et al as discussed above with respect to claims 1-3 and further as being a duplication of such circuitry.

Independent claim 8 parallels claim 1, but calls for a first and second phase difference detection circuitry. Although the prior art discloses only one – see figure 11 submitted by applicant in this application, the ability of having two such parallel circuits is considered merely a duplication of efforts and obvious to one of ordinary skill in the art.

With respect to claims 9 and 10, the limit control etc. are relied upon for the reasons stated above in paragraph 2 with respect to Konno et al.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 4 above – i.e., the acknowledged prior art, Konno et al, Nakajima et al and further as being a duplication of parts.

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Independent claim 11 parallels claim 4 and includes the second edge detection circuit, one for each of the phase detection circuits/branches/paths.

The examiner considers such as merely a duplication (necessary) when two-phase detection paths/branches are used, and as such obvious to one of ordinary skill in the art.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art relied upon for claims 5-7 as stated above in paragraph 4.

The limitations of these claims parallel the limitations of claims 5-7 and the same reasoning is relied upon herein to meet such limitations, i.e., the further teaching from Hayashi.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos
Primary Examiner
Art Unit 2627



AMP